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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/801,883 | 03/08/2001 | Gerbrand Deetman | 12598.0131CNUS00 | 7184 |

7590 01/24/2002

Craig M Lundell
Arnold White & Durkee
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| EXAMINER |
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OGDEN JR, NECHOLUS

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1751

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DATE MAILED: 01/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------------|-------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/801,883 | DEETMAN, GERBRAND | |
| | Examiner Necholus Ogden | Art Unit 1751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 March 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 90-104 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 90-104 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). 5 |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Craig Lundell on October 15, 2001.

The application has been amended as follows:

Please Cancel Claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholus Ogden whose telephone number is 703-308-3732. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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Necholus Ogden
Primary Examiner
Art Unit 1751

no

January 13, 2002

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Reissue Applications

1. The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Maintenance Fees

2. Claims 90-104 are rejected under 35 U.S.C. 251 for lacking basis for reissue because by statute a reissue application can only be granted for the unexpired portion of the term of the original patent. *In re Morgan*, 990 F.2d 1230, 26 USPQ2d 1392 (Fed. Cir. 1983).

Assignee

It appears that assent by assignee is improper. Monsanto is recorded but Solutia INC. is the assignee. Therefore, this application is objected to under 37 CFR 1.172(a) as the assignee has not established its ownership interest in the patent for which reissue is being requested. An assignee must establish its ownership interest in order to support the consent to a reissue application required by 37 CFR 1.172(a). The assignee's ownership interest is established by:

- (a) filing in the reissue application evidence of a chain of title from the original owner to the assignee, or
- (b) specifying in the record of the reissue application where such evidence is recorded in the Office (e.g., reel and frame number, etc.).

The submission with respect to (a) and (b) to establish ownership must be signed by a party authorized to act on behalf of the assignee. See MPEP § 1410.01.

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1. An appropriate paper satisfying the requirements of 37 CFR 3.73 must be submitted in reply to this Office action.

Oath/Declaration

Claims 90-104 are rejected as being based upon a defective oath/declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect(s) is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 90 and 104 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for (A) a trialkyl phosphate in combination with either a dialkyl aryl phosphate, an alkyl diaryl phosphate or mixtures thereof or (B) a trialkyl phosphate in combination with a triaryl phosphate, does not reasonably provide enablement for any phosphate ester basestock or a phosphate ester selected from the group consisting of triaryl phosphates, trialkyl phosphates, dialkylaryl phosphates, diaryl alkyl phosphates and mixtures thereof. The specification does not enable any person

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skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The specification does not appear to provide basis for employing any phosphate ester as in claim 90, which includes a fire resistant phosphate ester basestock. However, the specification is taught that the phosphate ester basestock contains (a) a trialkyl phosphate and either a dialkyl aryl phosphate, an alkyl diaryl phosphate or mixtures thereof of (b) a trialkyl phosphate and a triaryl phosphate. Note, see column 2, lines 43-52; column 5, line 66-column 6, line 3; column 12, lines 9-23; Table I (column 12); Table 2 (column 14). Moreover, the specification does not appear to provide basis for employing a phosphate ester selected from the group consisting of triaryl phosphate, trialkyl phosphates, dialkylaryl phosphates, diarylalkyl phosphates and mixtures thereof as in claim 104.

Nothing in the '551 patent supports the teachings of any phosphate ester as a basestock, but rather a phosphate ester comprising a trialkyl phosphate in combination with either a dialkyl aryl phosphate, an alkyl diaryl phosphate or mixtures thereof; or a phosphate ester comprising a trialkyl phosphate in combination with a triaryl phosphate.

Claims 90 and 104 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue,

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which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

The recapture of the broadened claimed subject matter is evidenced by the insertion of the specific alkyl substituent attached to the phosphate moiety of the phosphate ester(s) as claimed in the '551 patent. Applicant originally claimed a trialkyl phosphate in which the alkyl substituents are substantially C₄ or C₅. Applicant then filed an amendment that limited the trialkyl phosphate to an isoalkyl C₄ or C₅ that is bonded to the phosphate moiety via a primary carbon atom (see applicant's amendment filed 6-30-94), to overcome the prior art of record. Applicant filed the current reissue application, which has broadened the claimed language to a basestock phosphate ester.

Claim Rejections - 35 USC § 103

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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6. Claims 90-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackinnon (4,206,067) in view of Smith (3,679,587) and further in view of Great Britain (1,370,728) and French (2,120,127).

MacKinnon discloses an anti-erosion functional fluid comprising phosphate esters as the base fluid (col. 2, line 48-col. 3, line 50); a perhalometalloidic salt (col. 3, line 52-col. 5, line 42) and an organic base (col. 5, line 45-col. 6, line 41). Furthermore, MacKinnon teaches that trialkyl phosphate esters are preferred esters for the base fluid (col. 2, line 64-67), MacKinnon teaches that dialkyl aryl phosphates, alkyl diaryl phosphates, etc. may also be employed as base fluid (col. 2, lines 48-63). Moreover, it is taught that the trialkyl phosphate esters that give optimum results are those having alkyl groups of 1 to 12 carbon atoms, preferably 4 to 9, and are either branched or straight chain configuration (col. 3, line 4-9). MacKinnon teaches the inclusion of epoxide hydrolysis inhibitors such as 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate (col. 7, lines 17-20) and a specific diepoxide (col. 7, line 24-44); a methacrylic acid ester viscosity index improving agent having a molecular weight of from about 5,000 to 300,000 (col. 7, lines 63-col. 8, line 3); an oxidation inhibitor such as a hindered phenol di-t-butylparacresol (col. 7, lines 1-2); di(octylphenyl) amine (col. 8, line 18); and a foam inhibitor (col. 8, line 19).

MacKinnon teaches the inclusion of a perhalometalloidic salt, MacKinnon does not teach the inclusion of the presently required perfluoroalkylsulfonic acid.

Smith discloses a phosphate ester based functional fluid containing 0.001 to 5.0 parts of a perfluoroalkylsulfonic acid anti-erosion additive per 100 parts of the

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phosphate ester (col. 3, lines 4-52 and col. 1, lines 12-17). The addition of an epoxide acid scavenger such as 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate is also taught (col. 8, lines 46-col. 9, line 8 and base fluid B, C, D and E).

It would have been obvious to one of ordinary skill in the art at the time the invention was made, absent a showing to the contrary, to employ the perfluoroalkyl sulfonic acid as the perhalometalloidic acid which is an anti-erosion additive for phosphate ester based functional fluid and Smith teaches that the perfluoroalkyl sulfonic acid is an anti-erosion additive for a phosphate ester based functional fluid.

MacKinnon teaches the inclusion of various hindered phenols as oxidation inhibitors, MacKinnon does not disclose the inclusion of the presently preferred hindered polyphenols.

Great Britain '728 and French '217 teach the use of 4,4-methylene bis(2,6-di-t-butyl phenol), also known as Ethanox 702 as an antioxidant in a phosphate ester based functional fluid (claim 1 of page 9; and page 7, lines 10-46) and (Abstract and page 3, line 9), respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was made, and absent a showing to the contrary, to employ the hindered polyphenol of either GB '728 or FR '127 as the hindered phenol oxidation inhibitor of MacKinnon because MacKinnon appears to invite the inclusion of any oxidation inhibitor which is preferably a hindered phenol (col. 6, line 66-col. 7, line 2) and the hindered phenols of both GB '728 and FR '127 are known to be employed as antioxidants in a phosphate ester based functional fluid.

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7. Claims 90-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skydrol ® LD-4, in view of MacKinnon (4,206,067) and further in view of Great Britain (1,370,728) and French (2,120,127).

Skydrol ® LD-4, as admitted by patentee in U.S. 5,464,551 (Table 11, columns 35-36), contains 50-60% tributyl phosphate (TBP); 30-35% dibutyl phosphate (DBPP); 5-10% of poly(butyl/hexyl methacrylate) viscosity index improver HF411; 0.005-1.00% of an anti-erosion agent FC-98, a potassium salt of perflurooctylsulfonic acid; 4-8% of the epoxide scavenger MCS 1562, 2-ethylhexyl 3,4-epoxycyclohexanecarboxylate; 1.00% of the antioxidant Ionol, 2,6-di-tert-butyl-p-cresol; and 0.13-1.00% of the copper corrosion inhibitor FH-132, 1,2-(diphenylthio)ethane. Skydrol ® LD-4, however, does not contain an amine antioxidant, nor does Skydrol ® LD-4 contain phosphate esters containing isoalkyl C₄ or C₅ substituents.

MacKinnon is relied upon a set forth above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made, absent a showing to the contrary, to include the di(octylphenol) amine of MacKinnon which is a known antioxidant for phosphate ester based functional fluids and, would appear to benefit the functional fluid of Skydrol ® LD-4 in a synergistic or beneficial manner.

Moreover, it would have been obvious to one of ordinary skill in the art, absent a showing to the contrary, to substitute tri-isobutyl phosphate for the tri-n-butyl phosphate in the base fluid of Skydrol ® LD-4 because MacKinnon teaches the equivalence

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between tri-isobutyl phosphate and tri-n-butyl phosphate as base fluids in a functional fluid.

8. The declaration under 37 CFR 1.132 filed November 4, 1997 is insufficient to overcome the rejection of claims 90-104 based upon the rejections as set forth above for the following reasons:

9. Declarant states at paragraph 4, of the data provided in U.S. 5,464,551, that examples in the '551 patent demonstrates that the presently claimed compositions are thermally stable at higher temperatures. Declarant refers to examples 12 (Table 11) and example 13 (Tables 11 and 12), wherein Type IV fluids are compared with Type V fluids. As discussed in section #4 of the declaration, a comparison of results of Table 11 of the '551 patent to Skydrol ® LD-4 demonstrates that both the tri-isobutyl phosphate base stock and the additive package of the invention have cumulative effect in improving the thermal stability of Type V fluids at higher temperatures. However, these results do not appear to be commensurate in scope with the claimed invention. The samples included in the Table 11 are drawn to very specific phosphate esters and the independent claims of the instant application are drawn to broadly claimed base stock and various phosphate esters which have not been tested.

10. In example 13 of the '551 patent, it is acknowledged that Table 12 demonstrates that sample 5 and sample 11 exhibit longer fluid lives than either Skydrol ® LD-4 or Hyjet ® IVA. However, as discussed above, the data is not commensurate in scope with the claimed invention.

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11. Accordingly, it has been held that whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support." (In re Clemens, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholes Ogden whose telephone number is 703-308-3732. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

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Necholes Ogden
Primary Examiner
Art Unit 1751

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January 13, 2002